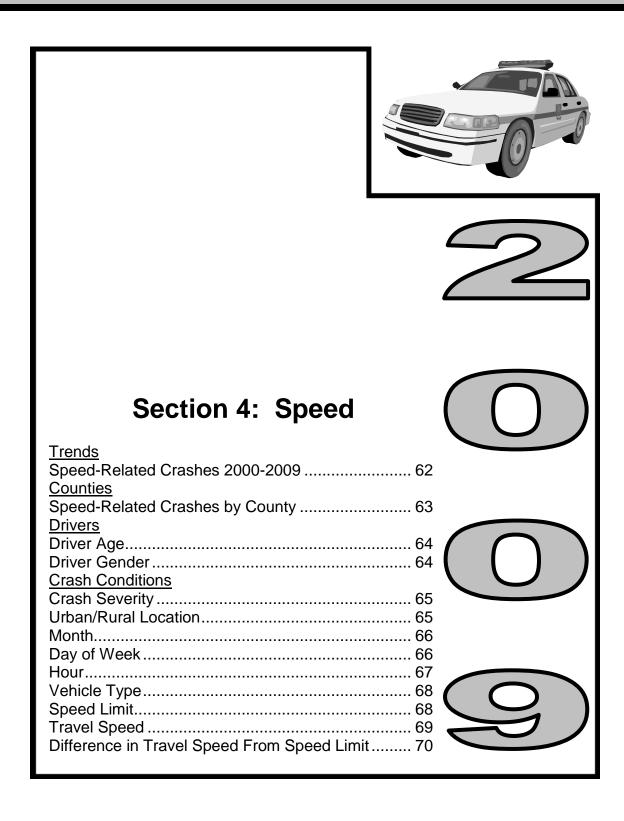
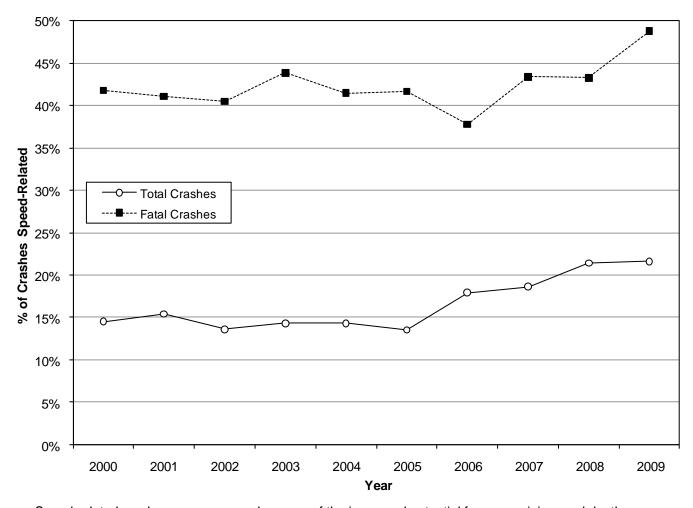
Speed



Trends

Speed-Related Crashes (Utah 2000-2009)

	Speed-Related Crashes												
	Property	Damag	ge Only		Injury			Fatal			Total		
	All	Spe	eed	All	Spe	ed	ed All		ed	All	Spe	ed	
Year	#	#	%	#	#	%	#	#	%	#	#	%	
2000	33,269	4,687	14.1%	19,564	2,934	15.0%	318	133	41.8%	53,151	7,754	14.6%	
2001	33,113	5,037	15.2%	19,332	3,003	15.5%	258	106	41.1%	52,703	8,146	15.5%	
2002	33,542	4,379	13.1%	19,552	2,770	14.2%	274	111	40.5%	53,368	7,260	13.6%	
2003	31,842	4,498	14.1%	18,285	2,604	14.2%	262	115	43.9%	50,389	7,217	14.3%	
2004	34,222	4,836	14.1%	19,423	2,764	14.2%	260	108	41.5%	53,905	7,708	14.3%	
2005	35,158	4,676	13.3%	19,545	2,653	13.6%	235	98	41.7%	54,938	7,427	13.5%	
2006	37,674	6,450	17.1%	18,264	3,539	19.4%	249	94	37.8%	56,187	10,083	17.9%	
2007	42,368	7,612	18.0%	18,619	3,687	19.8%	258	112	43.4%	61,245	11,411	18.6%	
2008	38,997	8,311	21.3%	17,125	3,622	21.2%	245	106	43.3%	56,367	12,039	21.4%	
2009	35,398	7,607	21.5%	15,752	3,379	21.5%	217	106	48.8%	51,367	11,092	21.6%	
Total	355,583	58,093	16.3%	185,461	30,955	16.7%	2,576	1,089	42.3%	543,620	90,137	16.6%	



- Speed-related crashes are a concern because of the increased potential for severe injury and death.
- The 10-year trend shows that 16.6% of total crashes and 42.3% of fatal crashes in Utah are speed-related.
- The percent of crashes that were speed-related increased for the fourth year in a row.
- Speed was a factor in 49.8% of fatal crashes in 2009 where speed was known.

Speed-Related Crashes by County (Utah 2009)

Speed-Related Crashes											
	PDO C	crashes	Injury	Crashes	Fatal (Crashes	To	otal			
		Rate		Rate		Rate		Rate			
		per 100		per 100		per 100		per 100			
		Million		Million		Million		Million			
County	#	VMT	#	VMT	#	VMT	#	VMT			
Wasatch	137	44.9	42	13.8	1	0.33	180	59.1			
Beaver	92	37.1	46	18.5	2	0.81	140	56.4			
Salt Lake	3,208	37.7	1,215	14.3	16	0.19	4,439	52.1			
Wayne	8	19.5	10	24.4	3	7.31	21	51.2			
Uintah	122	34.3	54	15.2	1	0.28	177	49.8			
Sevier	112	32.8	53	15.5	3	0.88	168	49.2			
Daggett	12	38.9	3	9.7	0	0.00	15	48.6			
Weber	531	32.7	233	14.4	10	0.62	774	47.7			
Utah	1,004	27.5	550	15.1	8	0.22	1,562	42.8			
Box Elder	265	28.9	115	12.5	5	0.54	385	42.0			
Rich	12	24.7	7	14.4	1	2.06	20	41.2			
Cache	224	26.0	120	13.9	7	0.81	351	40.8			
Juab	107	27.8	46	12.0	2	0.52	155	40.3			
Summit	187	26.3	88	12.4	3	0.42	278	39.1			
Morgan	38	28.3	11	8.2	1	0.75	50	37.3			
Iron	180	25.6	74	10.5	4	0.57	258	36.7			
Millard	118	25.9	46	10.1	2	0.44	166	36.5			
Garfield	20	16.9	20	16.9	2	1.69	42	35.5			
Davis	645	23.9	304	11.3	4	0.15	953	35.3			
Duchesne	56	24.5	20	8.7	3	1.31	79	34.5			
Kane	31	21.7	15	10.5	3	2.10	49	34.3			
Carbon	64	21.5	27	9.1	0	0.00	91	30.5			
Tooele	136	16.4	82	9.9	6	0.72	224	26.9			
Sanpete	34	15.6	18	8.3	3	1.38	55	25.3			
Piute	4	13.1	3	9.8	0	0.00	7	23.0			
San Juan	38	13.2	18	6.2	4	1.39	60	20.8			
Washington	155	11.4	122	9.0	3	0.22	280	20.5			
Emery	34	10.4	21	6.4	4	1.23	59	18.1			
Grand	33	9.7	16	4.7	5	1.47	54	15.8			
Statewide	7,607	29.0	3,379	12.9	106	0.40	11,092	42.3			

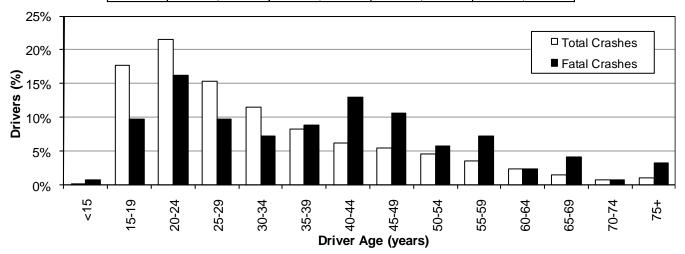
- Wasatch (59.1), Beaver (56.4), and Salt Lake (52.1) counties had the highest rates of speed-related total crashes per 100 million vehicle miles traveled.
- Wayne (7.31), Kane (2.10), and Rich (2.06) counties had the highest rates of fatal speed-related crashes per 100 million vehicle miles traveled.
- Grand (15.8), Emery (18.1), and Washington (20.5) counties had the lowest rates of speed-related total crashes per 100 million vehicle miles traveled.



Drivers

Age of Drivers in Speed-Related Crashes (Utah 2009)

		S	peed-R	elated	Drivers	5		
	PDO C	rashes	Injury (Crashes	Fatal C	rashes	То	tal
Age	#	%	#	%	#	%	#	%
<15	3	0.0%	11	0.3%	1	0.8%	15	0.1%
15-19	1,394	17.4%	630	17.5%	12	9.8%	2,036	17.4%
20-24	1,748	21.8%	712	19.8%	20	16.3%	2,480	21.1%
25-29	1,208	15.1%	552	15.4%	12	9.8%	1,772	15.1%
30-34	929	11.6%	384	10.7%	9	7.3%	1,322	11.3%
35-39	653	8.2%	286	8.0%	11	8.9%	950	8.1%
40-44	454	5.7%	237	6.6%	16	13.0%	707	6.0%
45-49	407	5.1%	217	6.0%	13	10.6%	637	5.4%
50-54	363	4.5%	147	4.1%	7	5.7%	517	4.4%
55-59	256	3.2%	147	4.1%	9	7.3%	412	3.5%
60-64	190	2.4%	86	2.4%	3	2.4%	279	2.4%
65-69	101	1.3%	64	1.8%	5	4.1%	170	1.4%
70-74	42	0.5%	33	0.9%	1	0.8%	76	0.6%
75+	70	0.9%	37	1.0%	4	3.3%	111	0.9%
Unknown	193	2.4%	51	1.4%	0	0.0%	244	2.1%
Total	8,011	100.0%	3,594	100.0%	123	100.0%	11,728	100.0%



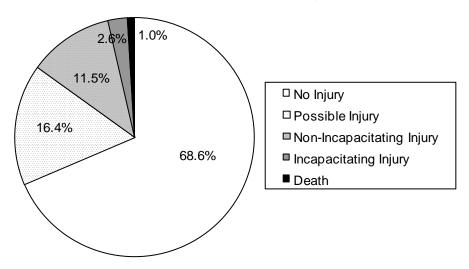
Younger drivers had the highest percentage of total speed-related crashes and fatal crashes.

Gender of Drivers in Speed-Related Crashes (Utah 2009)

	Speed-Related Drivers												
	PDO C	rashes	Injury (Crashes	Fatal C	rashes	Total						
Gender	#	%	#	%	#	%	#	%					
Male	5,022	62.7%	2,180	60.7%	98	79.7%	7,300	62.2%					
Female	2,833	35.4%	1,381	38.4%	25	20.3%	4,239	36.1%					
Unknown	156	1.9%	33	0.9%	0	0.0%	189	1.6%					
Total	8,011	100.0%	100.0%	11,728	100.0%								

 Male drivers represented 62.2% of the drivers in speed-related total crashes and 79.7% of the drivers in speed-related fatal crashes.

Speed-Related Crash Severity (Utah 2009)



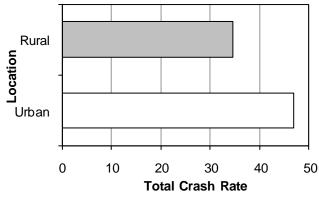
- A higher percentage of speed-related crashes were fatal (1.0%) compared to all motor vehicle crashes (0.4%).
- Speed-related crashes were 2.8 times more likely to be fatal than other motor vehicle crashes.
- The risk of death and severe injury is a direct exponential function of speed.

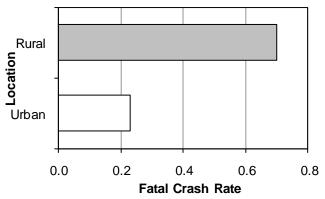
Speed-Related Crashes by Urban/Rural Location (Utah 2009)

	Speed-Related Crashes												
	PDC	Crashes	Injur	y Crashes	Fat	al Crashes	Total						
		Rate per 100 Million		Rate per 100 Million		Rate per 100 Million		Rate per 100 Million					
Location	#	VMT	#	VMT	#	VMT	#	VMT					
Urban	5,388	32.7	2,302	14.0	38	0.23	7,728	46.9					
Rural	2,219	22.8	1,077	11.1	68	0.70	3,364	34.6					
Total	7,607	29.0	3,379	12.9	106	0.40	11,092	42.3					

Total Crash Rates (Utah 2009)

Fatal Crash Rates (Utah 2009)





- While urban areas had a higher rate of total speed-related crashes per vehicle mile traveled, rural areas had a higher rate of fatal speed-related crashes per vehicle mile traveled.
- Speed-related crashes occurring in rural areas were 4.2 times more likely to result in a death than speedrelated crashes in urban areas.

Speed-Related Crashes by Month (Utah 2009)

		Sp	eed-R	elated C	rashe	S	•	
	PDO 0	Crashes	Injury	Crashes	Fatal (Crashes	To	otal
		Rate	Rate		Rate			Rate
Month	#	per Day	#	per Day	#	per Day	#	per Day
January	1,191	38.4	390	12.6	4	0.13	1,585	51.1
February	797	28.5	303	10.8	6	0.21	1,106	39.5
March	736	23.7	281	9.1	11	0.35	1,028	33.2
April	468	15.6	251	8.4	9	0.30	728	24.3
May	321	10.4	207	6.7	11	0.35	539	17.4
June	318	10.6	241	8.0	9	0.30	568	18.9
July	311	10.0	217	7.0	8	0.26	536	17.3
August	309	10.0	214	6.9	14	0.45	537	17.3
September	319	10.6	237	7.9	11	0.37	567	18.9
October	403	13.0	204	6.6	9	0.29	616	19.9
November	479	16.0	260	8.7	8	0.27	747	24.9
December	1,955	63.1	574	18.5	6	0.19	2,535	81.8
Total	7,607	20.8	3,379	9.3	106	0.29	11,092	30.4

- Overall, December (81.8), January (51.1), and February (39.5) had the highest rates of speed-related crashes per day.
- August (0.45) and September (0.37) had the highest rates per day of fatal speed-related crashes.

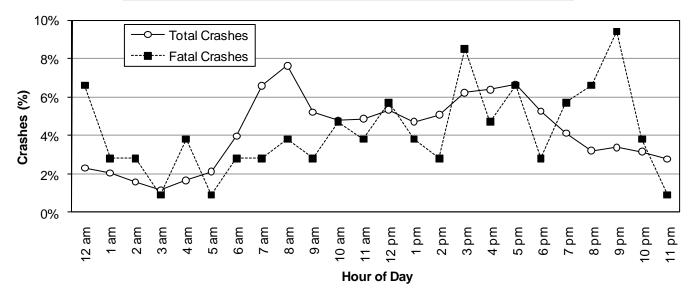
Speed-Related Crashes by Day of Week (Utah 2009)

		Spe	ed-Rela	ated Cr	ashes				
	PDO C	rashes	Injury C	Crashes	Fatal C	rashes	Total		
Day of Week	#	%	#	%	#	%	#	%	
Sunday	861	11.3%	407	12.0%	14	13.2%	1,282	11.6%	
Monday	1,238	16.3%	511	15.1%	15	14.2%	1,764	15.9%	
Tuesday	1,562	20.5%	587	17.4%	16	15.1%	2,165	19.5%	
Wednesday	1,020	13.4%	442	13.1%	18	17.0%	1,480	13.3%	
Thursday	841	11.1%	429	12.7%	12	11.3%	1,282	11.6%	
Friday	785	10.3%	446	13.2%	13	12.3%	1,244	11.2%	
Saturday	1,300	17.1%	557	16.5%	18	17.0%	1,875	16.9%	
Total	7,607	100.0%	3,379	100.0%	106	100.0%	11,092	100.0%	

- The highest percentage of speed-related total crashes occurred on Tuesday (19.5%) while the highest percentage of fatal crashes occurred on Saturday (17.0%) and Wednesday (17.0%).
- The lowest percentage of speed-related total crashes occurred on Friday (11.2%) while the lowest percentage of fatal crashes occurred on Thursday (11.3%).

Speed-Related Crashes by Hour (Utah 2009)

		Spe	ed-Re	elated (Crashe	S		
	PDO C	rashes	Injury (Crashes	Fatal 0	Crashes	To	otal
Hour	#	%	#	%	#	%	#	%
Midnight	165	2.2%	83	2.5%	7	6.6%	255	2.3%
1 a.m.	140	1.8%	83	2.5%	3	2.8%	226	2.0%
2 a.m.	107	1.4%	64	1.9%	3	2.8%	174	1.6%
3 a.m.	85	1.1%	41	1.2%	1	0.9%	127	1.1%
4 a.m.	120	1.6%	60	1.8%	4	3.8%	184	1.7%
5 a.m.	165	2.2%	68	2.0%	1	0.9%	234	2.1%
6 a.m.	314	4.1%	122	3.6%	3	2.8%	439	4.0%
7 a.m.	553	7.3%	174	5.1%	3	2.8%	730	6.6%
8 a.m.	631	8.3%	210	6.2%	4	3.8%	845	7.6%
9 a.m.	415	5.5%	159	4.7%	3	2.8%	577	5.2%
10 a.m.	352	4.6%	172	5.1%	5	4.7%	529	4.8%
11 a.m.	386	5.1%	149	4.4%	4	3.8%	539	4.9%
Noon	408	5.4%	177	5.2%	6	5.7%	591	5.3%
1 p.m.	341	4.5%	176	5.2%	4	3.8%	521	4.7%
2 p.m.	373	4.9%	186	5.5%	3	2.8%	562	5.1%
3 p.m.	450	5.9%	231	6.8%	9	8.5%	690	6.2%
4 p.m.	477	6.3%	225	6.7%	5	4.7%	707	6.4%
5 p.m.	501	6.6%	231	6.8%	7	6.6%	739	6.7%
6 p.m.	375	4.9%	205	6.1%	3	2.8%	583	5.3%
7 p.m.	303	4.0%	148	4.4%	6	5.7%	457	4.1%
8 p.m.	239	3.1%	109	3.2%	7	6.6%	355	3.2%
9 p.m.	265	3.5%	98	2.9%	10	9.4%	373	3.4%
10 p.m.	232	3.0%	112	3.3%	4	3.8%	348	3.1%
11 p.m.	210	2.8%	96	2.8%	1	0.9%	307	2.8%
Total	7,607	100.0%	3,379	100.0%	106	100.0%	11,092	100.0%



- Total speed-related crashes peaked in the morning (7:00 a.m. to 8:59 a.m.), with another peak in the late afternoon/evening (3:00 p.m. to 5:59 p.m.).
- Fatal speed-related crashes varied by hour and were highest during the 9:00 p.m. and 3:00 p.m. hours.

Speed-Related Crashes by Vehicle Type (Utah 2009)

		Speed	-Relate	ed Veh	icles				
	PDO C	rashes	Injury (Crashes	Fatal C	rashes	Total		
Vehicle Type	#	%	#	%	#	%	#	%	
Passenger Car	4,387	54.8%	1,834	51.0%	48	39.0%	6,269	53.5%	
SUV	1,510	18.8%	736	20.5%	27	22.0%	2,273	19.4%	
Pickup Truck	1,468	18.3%	600	16.7%	18	14.6%	2,086	17.8%	
Van	364	4.5%	155	4.3%	8	6.5%	527	4.5%	
Semi/Large Truck	201	2.5%	71	2.0%	10	8.1%	282	2.4%	
Motorcycle	26	0.3%	151	4.2%	11	8.9%	188	1.6%	
Bus	7	0.1%	1	0.0%	0	0.0%	8	0.1%	
Other	12	0.1%	38	1.1%	1	0.8%	51	0.4%	
Unknown	36	0.4%	8	0.2%	0	0.0%	44	0.4%	
Total	8,011	100.0%	3,594	100.0%	123	100.0%	11,728	100.0%	

- For total speed-related crashes, passenger car and SUV were the leading vehicle types.
- For fatal speed-related crashes, passenger car and SUV were the leading vehicle types.
- Motorcycle was overrepresented in speed-related crashes compared to other vehicle types in all crashes.
- Van was underrepresented in speed-related crashes compared to other vehicle types in all crashes.

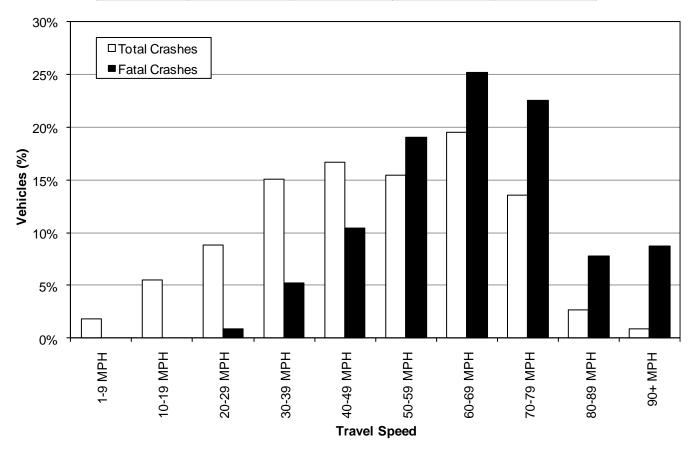
Speed-Related Crashes by Speed Limit (Utah 2009)

		Spec	ed-Rela	ated Ve	hicles			
	PDO C	rashes	Injury (Crashes	Fatal C	rashes	То	tal
Speed Limit	#	%	#	%	#	%	#	%
5-15 MPH	76	0.9%	27	0.8%	0	0.0%	103	0.9%
20-25 MPH	916	11.4%	435	12.1%	7	5.7%	1,358	11.6%
30-35 MPH	918	11.5%	487	13.6%	16	13.0%	1,421	12.1%
40-45 MPH	777	9.7%	480	13.4%	18	14.6%	1,275	10.9%
50-55 MPH	979	12.2%	461	12.8%	26	21.1%	1,466	12.5%
60-65 MPH	2,950	36.8%	1,098	30.6%	30	24.4%	4,078	34.8%
70+ MPH	815	10.2%	355	9.9%	24	19.5%	1,194	10.2%
Unknown	580	7.2%	251	7.0%	2	1.6%	833	7.1%
Total	8,011	100.0%	3,594	100.0%	123	100.0%	11,728	100.0%

- Nearly one-half (48.4% of known) of total speed-related crashes occurred where the speed limit was 60 MPH or higher.
- Fatal speed-related crashes were more likely to occur where there were higher speed limits. Two-thirds (66.1% of known) of fatal speed-related crashes occurred where the speed limit was 50 MPH or higher.
- When compared to all crashes, speed-related crashes were more likely to occur on roads with higher speed limits.
- Studies show that a 5% increase in average speed leads to a 10% increase in injury crashes and a 20% increase in fatal crashes. A 5% decrease in speed leads to a 10% decrease in injury crashes and a 20% decrease in fatal crashes.

Speed-Related Crashes by Travel Speed (Utah 2009)

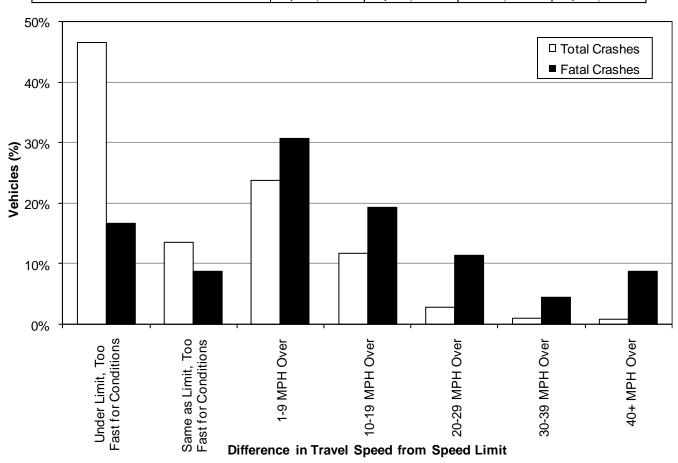
		Spec	d-Rela	ted Ve	hicles			
	PDO C	rashes	Injury C	Crashes	Fatal C	rashes	To	tal
Travel Speed	#	%	#	%	#	%	#	%
1-9 MPH	143	1.8%	42	1.2%	0	0.0%	185	1.6%
10-19 MPH	456	5.7%	105	2.9%	0	0.0%	561	4.8%
20-29 MPH	695	8.7%	204	5.7%	1	0.8%	900	7.7%
30-39 MPH	1,033	12.9%	507	14.1%	6	4.9%	1,546	13.2%
40-49 MPH	1,106	13.8%	593	16.5%	12	9.8%	1,711	14.6%
50-59 MPH	1,050	13.1%	515	14.3%	22	17.9%	1,587	13.5%
60-69 MPH	1,374	17.2%	592	16.5%	29	23.6%	1,995	17.0%
70-79 MPH	911	11.4%	452	12.6%	26	21.1%	1,389	11.8%
80-89 MPH	140	1.7%	123	3.4%	9	7.3%	272	2.3%
90+ MPH	41	0.5%	42	1.2%	10	8.1%	93	0.8%
Unknown	1,062	13.3%	419	11.7%	8	6.5%	1,489	12.7%
Total	8,011	100.0%	3,594	100.0%	123	100.0%	11,728	100.0%



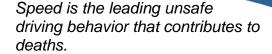
- 60-69 MPH (19.5% of known) and 40-49 MPH (16.7% of known) were the leading travel speeds of vehicles in total speed-related crashes.
- Two-thirds (64.3% of known) of vehicles in fatal speed-related crashes were traveling 60 MPH or higher.
- Speed-related vehicles in fatal crashes were more likely to be traveling at higher speeds. The higher the
 speed the greater the amount of energy that must be absorbed in a crash, hence there is more likelihood of
 serious injury and death.
- Drivers become increased risks to themselves and other people on the highway due to higher speeds.

Speed-Related Crashes by Difference in Travel Speed From Speed Limit (Utah 2009)

Sp	eed-R	elated	Vehicl	es				
	PDO C	rashes	Injury (Crashes	Fatal C	rashes	Total	
Travel Speed vs. Speed Limit	#	%	#	%	#	%	#	%
Under Limit, Too Fast for Conditions	3,527	44.0%	1,143	31.8%	19	15.4%	4,689	40.0%
Same as Limit, Too Fast for Conditions	931	11.6%	414	11.5%	10	8.1%	1,355	11.6%
1-9 MPH Over Speed Limit	1,532	19.1%	825	23.0%	35	28.5%	2,392	20.4%
10-19 MPH Over Speed Limit	649	8.1%	506	14.1%	22	17.9%	1,177	10.0%
20-29 MPH Over Speed Limit	135	1.7%	138	3.8%	13	10.6%	286	2.4%
30-39 MPH Over Speed Limit	32	0.4%	55	1.5%	5	4.1%	92	0.8%
40+ MPH Over Speed Limit	35	0.4%	29	0.8%	10	8.1%	74	0.6%
Unknown	1,170	14.6%	484	13.5%	9	7.3%	1,663	14.2%
Total	8,011	100.0%	3,594	100.0%	123	100.0%	11,728	100.0%



- It is troubling to see that 4,021 vehicles in crashes were known to be traveling over the posted speed limit.
- Speed-related vehicles in fatal crashes were more likely to be exceeding the posted speed limit by greater amounts.
- Speed-related vehicles in total crashes were more likely to be traveling too fast for conditions.
- Nearly three out of every four speed-related vehicles (74.6% where speed was known) in fatal crashes were traveling over the posted speed limit.
- Speed increases the crash energy by the square of the speeds. When impact speed increases from 40 to 60 MPH (a 50% increase), the energy that needs to be manages increases by 125%.

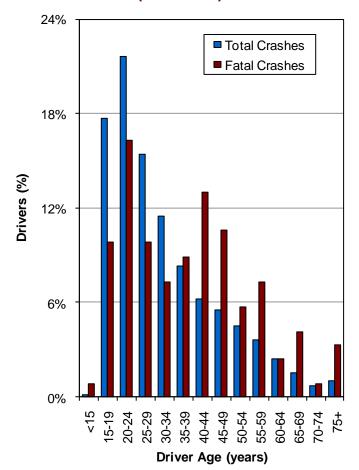




Did you know in 2009:

- 11,092 speed-related crashes occurred in Utah which resulted in 5,129 injured persons and 125 deaths.
- Speed was a factor in 49% of fatal crashes in 2009.
- Speed-related crashes were 2.8 times more likely to be fatal than other motor vehicle crashes.

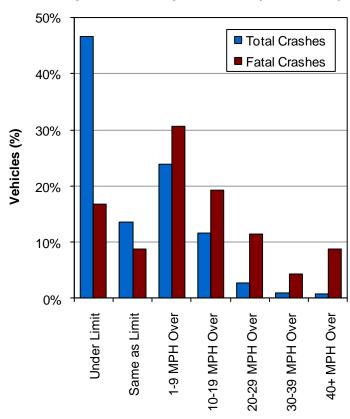
Age of Drivers in Speed-Related Crashes (Utah 2009)



 Drivers aged 15-24 years had the highest percentage of total speed-related crashes.



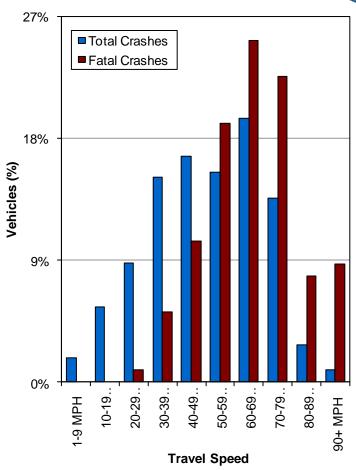
Speed-Related Crashes by Difference in Travel Speed From Speed Limit (Utah 2009)



Difference in Travel Speed from Limit

- Speed-related vehicles in fatal crashes were more likely to be exceeding the posted speed limit by greater amounts.
- Drivers become increased risks to themselves and other people on the roadway due to higher speeds.

Speed-Related Crashes by Travel Speed (Utah 2009)

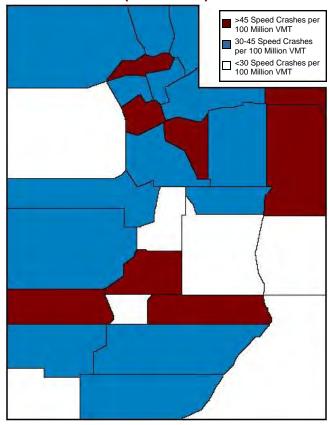


- Speed-related vehicles in fatal crashes were more likely to be traveling at higher speeds.
- The higher the speed the greater the amount of energy that must be absorbed in a crash, hence there is more chance of serious injury or death.

Speed



Speed-Related Crash Rates by County (Utah 2009)



 Wasatch, Beaver, Salt Lake, and Wayne Counties had the highest speed-related crash rates per miles traveled.

Speeding is one of the leading factors contributing to traffic crashes. Speeding is dangerous because it:

- Magnifies drivers' errors;
- Extends the distance necessary to stop a vehicle;
- Increases the distance a vehicle travels while the driver reacts to a situation;
- Reduces a driver's ability to steer safely around curves or objects in the road;
- Decreases the effectiveness of vehicle design features, such as seat belts;
- Reduces the stability of the vehicle structure;
- Increases the number of crashes:
- Increases the severity of crashes. For every 10 MPH over 50 MPH, the risk of death in a crash is doubled.

Drivers need to remember there is a reason for speed limits. The roadways are a dangerous place and the speed limits are designed to protect everyone—drivers, passengers, and pedestrians. The posted speed limit is the law. Slow down and obey speed limits.

